Amendments to the Specifications:

Please replace paragraph [0044] with the following amended paragraph:

[0044] The operation of the sparse CLE 230 is generally identical to the operation of the concatenated CLE 220, with the exception that a delay line ~~212~~ **512** is placed between a tap delay output of equalizer 204a and a FIR filter input of equalizer 204b. By placing delay line ~~212~~ **512** between the tap delay output of equalizer 204a and the FIR input of equalizer 204b, the sparse CLE 230 may be used to handle multi-path profiles in which a large delay separates clusters of multi-path sub-signals as was described for FIG. 1d. As shown in FIG. 2d, equalizer 204a may handle taps 1 to N and equalizer 204b may handle taps N+1 to 2N for the sparse CLE 230. As previously explained for other CLE embodiments, the output of sparse CLE 230 may be descrambled and despread using a descrambler/despreader block 206.

Please replace paragraph [0045] with the following amended paragraph:

[0045] FIG. 3 is a block diagram illustrating a receiving system ~~300~~ that uses closed-loop transmit diversity (CLTD) equalization. As shown in FIG. 3, the receiving system ~~300~~ may comprise a single-stage equalizer pair 304, descrambler/despreader blocks 206, symbol-rate buffers 308, and CLTD decode block 312. The single-stage equalizer pair CLE 304 may receive a downsampled input signal as previously described for other receiving systems. The single-stage equalizer pair 304 may operate as two separate NLMS equalizers (e.g., equalizer 204 of FIG. 2a) preferably to support wireless systems that use multiple antennas for transmitting. The received signal is input also to CLTD decode block 312, which functions according to CLTD standards. The outputs of the NLMS equalizer pair 304 may be descrambled and despread by descrambler/despreader blocks 206 and forwarded to symbol-rate buffers 308 which synchronize the combination of the descrambled/despread equalizer outputs Y.sub.1(n) and Y.sub.2(n) with the calculation of CLTD weight estimates W.sub.1(n) and W.sub.2(n). In particular, the receiving system ~~300~~ may be used when multiple antennas are used to transmit a wireless signal.

Please replace paragraph [0046] with the following amended paragraph:

[0046] FIG. 4 shows a block diagram illustrating a receiving system ~~400~~ that uses space-time transmit diversity (STTD) equalization. As shown in FIG. 4, the system ~~400~~ may comprise a single-stage equalizer pair CLE 304, decrambler/despreader blocks 206, buffer blocks 408, and STTD decoding block 410. The single-stage equalizer pair CLE 304 (e.g. two NLMS equalizers) receives a downsampled input signal as previously described for other receiving systems. The output of the equalizer pair block 304 may be descrambled and despread using the descrambler/despreader blocks 406, buffered every two symbols using buffer blocks 408, and decoded according to the STTD standard using STTD decoding block 410. In particular, the receiving system ~~400~~ may be used when multiple antennas are used to transmit a wireless signal.